

Toth et al.

U.S. Serial No. 10/605,789

REMARKS

Claims 1, 2, 5, 6, 8-14, and 16-23 are currently pending. Claims 1, 2, and 8-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Romeas (USP 6,148,062) in view of Moore (USP 4,181,858). Claim 5 was rejected as being unpatentable over Romeas and Moore, and further in view of Popescu (USP 6,501,828). Claim 6 stands rejected as being unpatentable over Romeas, Moore, and Popescu, and further in view of Hsieh (USP 5,970,112). Claims 11, 14, and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moore in view of Popescu and Hoffman et al. The Examiner then rejected claims 12 and 13 as being unpatentable over Moore, Popescu, and Hoffman, and further in view of Hsieh. Claims 17 and 19-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Popescu in view of Toth et al. (USP 6,307,918) and Moore. Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Popescu, Toth et al., and Moore, and further in view of Gunji et al. (JP 08-266523). Claims 22 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Popescu, Toth et al., and Moore, and further in view of Winter (USP 4,998,268).

Claim 1 has further been amended to patentably distinguish the claimed invention from the art of record. Specifically, the claim has been amended to clarify that the respective body of each filter is formed at a first terminal end and the tail extends to a second terminal end opposite the first terminal end and that the body, the curved portion, and the tail of each filter collectively define an attenuation profile that ranges from a maximum at the body to a minimum at the tail.

Romeas fails to teach or suggest such a structure. The reference teaches compensating plates (17a, 18b) where a "body" portion is formed between a pair of terminal ends such that curved portions extend from both ends of the body. In this regard, an attenuation profile where a maximum attenuation is defined at one terminal end of the filter and a minimum attenuation is defined at the other terminal end of the filter is not disclosed. Moore likewise fails to teach such a construction.

While Moore discloses a filter assembly defined by a pair of filters where one filter is closer to an x-ray source than the other filter, Moore fails to teach or suggest the filter constructions called for in claim 1. Specifically, Moore fails to teach or suggest a first moveable filter having a non-uniform thickness, the first moveable filter having a body, a tail, and a curved

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portion connecting the base to the tail, wherein the tail is positioned at a distal end relative to an x-ray source designed to project x-rays from a focal point; and a second moveable filter independent of the first moveable filter and having a non-uniform thickness, the second moveable filter having a body, a tail, and a curved portion connecting the base to the tail, wherein the tail is positioned at a distal end relative to the x-ray source. Accordingly, claims 1, 2, and 8-10 are believed to be in condition for allowance.

Claim 11 stands rejected as being unpatentable over Moore in view of Popescu and Hoffman et al. As acknowledged by the Examiner, "Moore does not specifically disclose non-uniform filters mirroring each other defined by a base, tail, and curved portion connecting the base to the tail..." As such, the Examiner has also relied upon that disclosed by Popescu. Popescu does teach mirroring filters, however, the reference fails to teach that the filters can be aligned with respect to one another such that one filter is closer to an x-ray source than the other filter. As shown in Fig. 2 thereof, Popescu teaches translation of the filters 22 and 23 relative to one another along a common translational path, as depicted by double-arrowed line "b". Thus, Moore and Popescu, taken singly or in combination, fail to teach or suggest that which is being claimed. Hoffman et al., which the Examiner relied upon for its teaching of CT system components, likewise fails to teach such a filter construction. As such, claims 11, 14, and 16 are believed to be in condition for allowance.

Claim 17 has been amended to clarify that the stationary third filter is positioned more proximate to the subject than either the moveable first filter or the moveable second filter. As best illustrated in Fig. 5 of Toth et al., the reference teaches a fixed filter 94 that is closer to the x-ray source than the movable z-filter 98. As such, Toth et al. fails to teach or suggest that which is being claimed. Popescu and Moore, as acknowledged by the Examiner, fail to teach such a claimed stationary or fixed filter. Therefore, claims 17 and 19-21 are believed to be in condition for allowance.

Regarding the rejections of claims 5, 6, 12, 13, 18, 22, and 23, Applicant disagrees with the Examiner with respect to the art as applied, but in light of claims 5, 6, 12, 13, 18, 22, and 23 depending from what are believed otherwise allowable claims, Applicant does not believe

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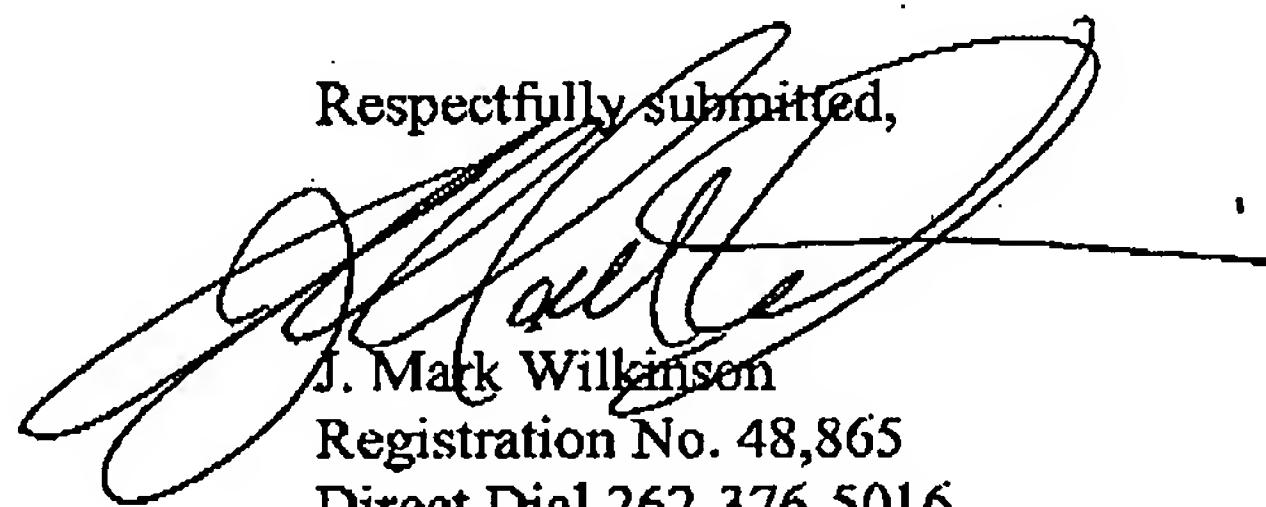
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additional remarks are necessary and, therefore, requests allowance of claims 5, 6, 12, 13, 18, 22, and 23 based on the chain of dependency.

By these amendments, Applicant believes the present application to be in condition for allowance. Accordingly, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-2, 5-6, 8-14, and 16-23.

Applicant appreciates the Examiner's consideration of the amendments and remarks presented herein, and cordially invites the Examiner to contact the undersigned with any questions regarding this matter.

Respectfully submitted,



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